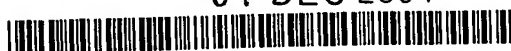


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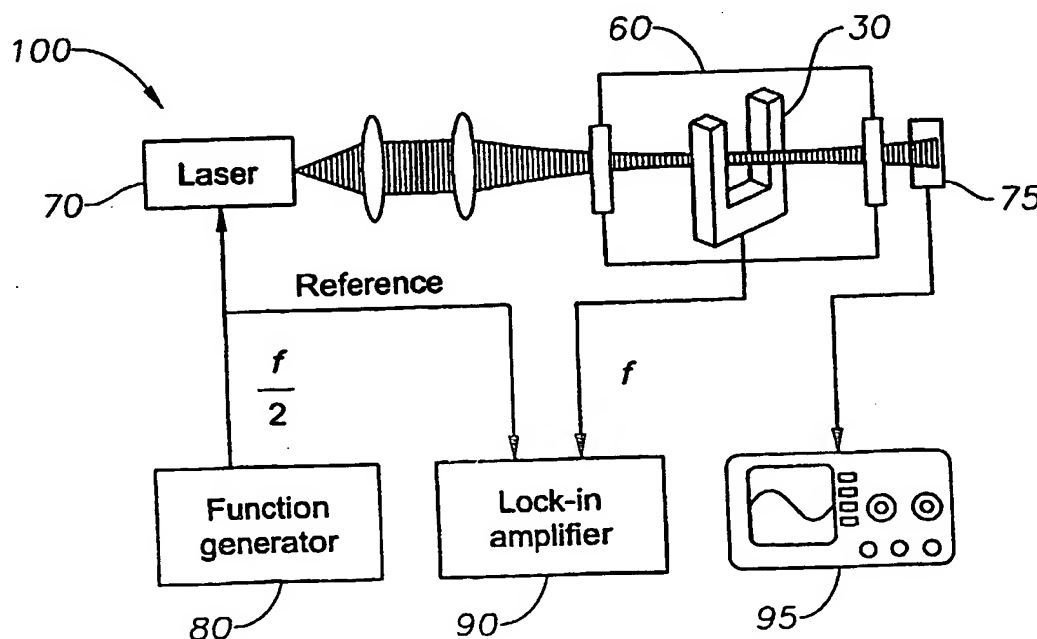
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(54) Title: QUARTZ-ENHANCED PHOTOACOUSTIC SPECTROSCOPY



(57) Abstract: Methods and apparatus for detecting photoacoustic signals in fluid media are described. The present invention differs from conventional photoacoustic spectroscopy in that rather than accumulating the absorbed energy in the fluid of a sample cell, the absorbed energy is accumulated in an acoustic detector or sensitive element. In a preferred embodiment, the acoustic detector comprises piezoelectric crystal quartz. The quartz is preferably in the shape of a tuning fork.